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**ecology and environment, inc.**

International Specialists in the Environment

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September 25, 1997

U.S. Environmental Protection Agency  
75 Hawthorne Street  
San Francisco, CA 94105

START#: 099701-012  
TDD#: 09-9705-0013  
PAN#: 0191DTTGXX

Attention: Karen Nelson, Project Officer

Subject: Victoria Golf Course Site, Los Angeles County, California  
Martin Adams Dump, Los Angeles, County, California

Attached are Ecology and Environment, Inc.'s Superfund Technical Assessment and Response Team ESI Reviews for the Victoria Golf Course site and the Martin Adams Dump site. These reviews include the review checklists and confidential comments.

If you have any questions regarding these ESI Reviews, please do not hesitate to contact me.

Respectfully submitted,

Jim James  
Superfund Technical Assessment and Response Team Member

Attachment

copy: Rachel Loftin, EPA Task Monitor

**ecology and environment, inc.**

International Specialists in the Environment

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**Expanded Site Inspection Review**

**Site:** Victoria Golf Course  
aka BKK Carson  
340 East 192nd Street  
Carson, CA 90746

**Site EPA ID Number:** CAD980818926

**ESI Prepared by:** Chris Fox  
California Environmental Protection Agency  
Department of Toxic Substances Control

**Date of ESI:** June 23, 1997

**Contract Number:** 68-W6-0010

**START Number:** 099701-012

**TDD Number:** 09-9705-0013

**PAN Number:** 0191DTTGXX

**Submitted to:** Karen Nelson  
EPA Region 9

**Date:** September 9, 1997

**Prepared by:** Jim James  
START Member  
Ecology and Environment, Inc.

**Expanded Site Inspection Review (Cont'd)**  
**Site: Victoria Golf Course**

**HRS CONSIDERATIONS**

The following information is presented in the Expanded Site Inspection (ESI) Report:

- Vinyl chloride was detected in on-site and downgradient groundwater samples but not in upgradient groundwater samples. It should be noted, however, that it is not clear from the ESI whether the water sampled meets the HRS definition of groundwater.
- Groundwater is present beneath the site, in a series of aquifers that may be interconnected.
- Local water purveyors use groundwater supplemented by imported surface water to serve a large population.

## REMEDIAL SITE ASSESSMENT DECISION - EPA REGION 9

Site Name: Victoria Golf Course EPA ID #: CAD980818926  
Alias Site Names: BKK Landfill  
City: Carson County or Parish: Los Angeles State: CA  
Refer to Report Dated: 09/09/97 Report Type: Expanded Site Inspection Review  
Report developed by: Jim James, Ecology and Environment, Inc., START

### DECISION:

- ☐ 1. Further Remedial Site Assessment under CERCLA (Superfund) is not required because:
- ☐ 1a. Site does not qualify for further remedial site assessment under CERCLA (No Further Action - NFA) and:
    - ☐ EPA is retaining this site in CERCLIS because the Federal Superfund program still has an interest in the site.
    - ☐ EPA is archiving this site in CERCLIS because it does not warrant Federal Superfund action, or an appropriate Federal Superfund response action has been completed. This means that EPA believes no further Federal Superfund response is appropriate. Archived sites may be returned to the CERCLIS site inventory if new information necessitating further Federal Superfund consideration is discovered.
  - ☐ 1b. Site may qualify for further action, but is deferred to: ☐ RCRA ☐ NRC
- ☐ 2. Further Assessment Needed Under CERCLA
- 2a. (Optional) Priority:  
☐ Higher ☐ Lower
- 2b. Activity Type  
☐ PA ☐ ESI  
☐ SI ☐ HRS evaluation ☐ Other \_\_\_\_\_

### DISCUSSION/RATIONALE:

Report Reviewed,  
Approved and Site  
Decision Made by: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

\*\*\*\*\*CONFIDENTIAL\*\*\*\*\*  
\*\*\*\*\*PREDECISIONAL DOCUMENT\*\*\*\*\*

This section provides confidential review comments on the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) Hazard Ranking System (HRS) scoresheet packet and Expanded Site Inspection (ESI) report for the Victoria Golf Course site in Carson, California.

1.0 PACKAGE COMPLETENESS

The submitted package is not complete. The Site Visit Interview and Observations Report included in the packet was prepared by Bechtel Environmental, Inc., (BEI) in February 1994; it was not related to DTSC's field activities. Photocopies of the references were not included in the packet.

2.0 HRS SCORESHEET

The rationale provided do not adequately describe the aquifers present beneath the site, or document their interconnectedness, or their drinking water use. It is not clear that the Bellflower Aquitard, identified as the aquifer of concern, meets the HRS definition of an aquifer. The suggestion of shallow aquifer interconnectedness based on chlorobenzene being found in both the Bellflower Aquitard and the Lynwood Aquifer, about 2 miles from the site, is inadequate. The suggestion of deeper aquifer interconnectedness between the Lynwood Aquifer and the Silverado Aquifer, about 2 miles from the site, based on Department of Water Resources Bulletin 104 is not referenced clearly enough to confirm.

Although an observed release of vinyl chloride to an aquifer of concern is suggested, complete data are not provided concerning sample locations, sample depths, and contaminant concentrations. The rationale, apparently mistakenly, states "Vinyl chloride from [sic] was detected upgradient and downgradient in groundwater screened in the Bellflower Aquitard."

The calculations and rationale for the groundwater pathway are incorrect. Information regarding well production rates or capacities was not provided or used to apportion the potential contamination factor. Instead, after the portion of the population served by imported surface water was subtracted from the total population served by the water system, the remaining population was equally apportioned to the drinking water wells. Since a single source provided more than 40 percent of the total amount of water used, the potential contamination population should have been apportioned according to distribution. Also, the data used to calculate the populations were not current; the data were based on information collected between 1990 and 1994.

Recreational users of the golf courses should not be evaluated as targets under the air pathway, although workers at the golf courses should be evaluated.

### 3.0 ESI REPORT

#### 3.1 GENERAL COMMENTS

The report did not include a subsection or any discussion of the surface water migration pathway.

No references (numbers or otherwise) were provided in the text of the report.

The text of the report states that there are five drinking-water wells within 4 miles of the site and that 39,000 people are served by groundwater wells located within 4 miles. However, the HRS scoresheets identify 29 wells within 4 miles serving almost 74,000 people. The text of the report refers to the Bellflower Aquitard, the Gage Aquifer, the Lynwood Aquifer, and the Silverado Aquifer, but the HRS rationale only refers to the Bellflower Aquitard, the Lynwood Aquifer, and the Silverado Aquifer.

Section 3.2 states that the VOC and SVOC results for soil are inconclusive, but the summary of pertinent HRS factors in Section 6.0 states that VOCs, including vinyl chloride, were detected in soil and groundwater.

#### 3.2 REPORT INTRODUCTION

The Introduction of the ESI does not include the date of, or reason for, CERCLIS entry. In addition, the Introduction does not include a description of who completed the PA or when it was completed.

#### 3.3 SITE DESCRIPTION

The quality of all maps is poor. The maps are illegible and contain extraneous information.

##### 3.3.1 Site Location

Section 2.1, Site Location, includes information that should be provided under Site Description, i.e., descriptions of on-site facilities.

##### 3.3.2 Site Description

Relevant historic and current structures are not described in this section.

##### 3.3.3 Operational History

Section 2.2, Operational History, does not include complete information on current ownership (i.e., dates of ownership), and gaps in the information are not identified.

The management and disposal of hazardous substances associated with current operations are not described.

### 3.4 INVESTIGATIVE EFFORTS

#### 3.4.1 Previous Sampling and Analysis

In general, the descriptions in Subsection 3.1, Previous Investigations, did not include adequate information regarding previous sample locations, the numbers of samples collected, sampling depths, or laboratory methods.

Subsection 3.1 refers to methane analyses conducted by the South Coast Air Quality Management District (SCAQMD). Methane is not a hazardous substance under CERCLA, and analyses using semi-selective field instruments such as an Organic Vapor Analyzer (OVA) are not suitable for HRS purposes. While the presence of methane may be useful in characterizing the waste source type, i.e., a landfill with evidence of biogas, the report should clearly distinguish between those substances that are CERCLA hazardous substances and those that are not.

#### 3.4.2 EPA Sampling

Under Section 3.2, EPA Sampling, the name(s) of the party(ies) that conducted sampling for EPA is not stated explicitly. Again, information regarding sample locations, the numbers of samples collected, sampling depths, and laboratory methods was not provided.

### 3.5 HRS CONSIDERATIONS

#### 3.5.1 Sources of Contamination

Section 4.1, Sources of Contamination, does not explicitly describe the waste source as an unlined landfill with evidence of biogas release. The size, depth, and capacity of the landfill are not described, nor is the estimated volume of waste received. Specific hazardous substances associated with the source are not identified. This section makes reference to regional groundwater contamination which, without further discussion, may confound the interpretation of sampling data.

#### 3.5.2 Groundwater Migration Pathway

Although the groundwater pathway is the primary pathway of concern, Section 4.2 does not include descriptions of the following: regional geology; local geologic setting; depth to, and thickness of, water bearing units; explicit identification of which aquifers are major sources of groundwater locally; adequate documentation of the presence of aquifer interconnection; depth to groundwater beneath the site; direction of groundwater flow; and unsaturated zone materials under the site. Although the ESI sampling focused on groundwater, no groundwater sampling results are presented or referenced. No groundwater target information is provided in Section 4.2.



### 3.5.3 Surface Water Migration Pathway

There is no discussion of the surface water pathway.

### 3.5.4 Soil Exposure and Air Migration Pathways

Section 4.4, Air Pathways, does not provide a clear overall pathway description.

There is no discussion of the site setting, no description of actual or potential air targets, nor any conclusion for the air migration pathway.

### 3.6 EMERGENCY RESPONSE CONSIDERATIONS

The reference to over 40 dumps in the vicinity of the site and regional contamination of the perched aquifer without further discussion may confound the interpretation of groundwater sampling data. A perched aquifer is not likely to meet the HRS definition of groundwater.

### 3.7 SUMMARY

The summary introduces information not previously presented concerning groundwater targets, the depth to aquifer, and mention that vinyl chloride is a degradation product of various other VOCs detected in groundwater. The summary uses acronyms, i.e., HRS and VOCs, without preceding them by their full names. The summary does not include the following: a site description, a description of operational and waste management practices, and a summary of regulatory involvement.

The summary states that drinking water wells within 4 miles of the site serve 39,000 people, but the HRS scoresheets identify almost 74,000 people served by groundwater within 4 miles of the site. The HRS rationale, apparently mistakenly, states, "Vinyl chloride from [sic] was detected upgradient and downgradient in groundwater screened in the Bellflower Aquitard." This is inconsistent with the suggested observed release presented in the summary.

Section 3.2 states that the VOC and SVOC results for soil are inconclusive, but the summary of pertinent HRS factors in Section 6.0 states that VOCs, including vinyl chloride, were detected in soil and groundwater.

The HRS factors, as presented, were generally relevant, but may not be accurate.

## EXPANDED SITE INSPECTION REVIEW CHECKLIST

Site Name: Victoria Golf Course

Site EPA ID Number: CAD980818926

Name of Reviewer: Jim James, E & E START

Date of Review: September 9, 1997

This review checklist aims to focus Expanded Site Inspection (ESI) review efforts and to provide a basis for the Confidential Comments of the ESI review. This checklist addresses package completeness (Section 1.0), the Hazard Ranking System (HRS) scoresheet for the site (Section 2.0), and the ESI Report text (Section 3.0). In the "Yes/No" column, the reviewer should enter a **Y** if the information is given in a complete and clear manner, an **I** if the given information is incomplete, a **U** if the given information is unclear, an **N** if the information is missing, and an **N/A** if the question is not applicable to the site. Information that is indicated as missing, unclear, or incomplete is to be explained in the Confidential Comments.

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### Section 1.0

#### PACKAGE COMPLETENESS

	<u>Yes/No</u>
<i>Does the Site Inspection Report package contain:</i>	
Transmittal List?	<u>Y</u>
HRS Scoresheet and Scoresheet Rationale?	<u>Y</u>
SI Report?	<u>Y</u>
EPA Region IX Remedial Site Assessment Decision Form?	<u>Y</u>
Reference List?	<u>Y</u>
Photographic Documentation?	<u>Y</u>
Contact Log?	<u>Y</u>
Contact Reports?	<u>Y</u>
Site Visit Interoffice Communication?	<u>U</u>
Sample Plan? (If sampling was conducted for the SI.)	<u>Y</u>
Analytical Results? (If sampling was conducted for the SI.)	<u>Y</u>
Latitude and Longitude Calculation Worksheet?	<u>Y</u>
Photocopies of the references?	<u>N</u>
NPL Prioritization?	<u>Y</u>

Section 2.0

HRS SCORESHEET REVIEW

Does the Scoresheet Packet Contain:

Yes/No

- a. Summary Scoresheet? Y
- b. Pathway scoresheets? (For pathways that contribute significantly to the site score) Y
- c. Rationale for pathway scoresheets? Y

Scoresheet Evaluation

- a. Is Summary Scoresheet information correct and complete?  
(Including site name, site location, CERCLIS ID number, latitude/longitude,  
township/range/section, RCRA status, state superfund status) Y
- b. Do scores on Summary Scoresheet agree with pathway scores? Y
- c. Is calculation of overall site score from pathway scores correct? Y

*For pathways that do not contribute significantly to the score are:*

- d. Pathway(s) asterisked on the Summary Scoresheet? Y
- e. Scoresheets for pathway(s) deleted? Y
- f. Rationale given for why pathway does not contribute significantly to  
site score? Y
- g. Rationale for low scoring pathways sufficient? Y

*For pathways contributing significantly to the site score:*

- h. Are calculations correct for each pathway scoresheet? I
- i. Are rationale provided for each factor value on pathway scoresheet(s) > I
- j. Do the rationale provide supporting data for each factor value? N
- k. Have factors driving the score been accurately evaluated (i.e., <28.5 or >28.5) U

## Section 3.0

### SI REPORT REVIEW

#### 3.1 GENERAL COMMENTS (*All Reports*)

Yes/No

##### *Site Eligibility for CERCLA Assessment*

- a. The site is not a federally-owned or operated facility.
- b. The site is not a RCRA TSD Facility.

Y

Y

##### *Report Style and Structure*

- c. Is the report free of major grammatical and/or spelling errors that affect the meaning of important information?
- d. Do report headings and subheadings conform with Site Assessment Program standards?
  - 1.0 Introduction, 1.1 Apparent Problem, etc.
  - Appendix A (Reference List)
  - Appendix B (Photographic Documentation)
  - Appendix C (Contact Log)
  - Appendix D (Contact Reports)
  - Appendix E (Site Visit Interview and Observations Report)
  - Appendix F (Sample Plan, if sampling was conducted for the SI)
  - Appendix G (Analytical Results, if sampling was conducted for the SI)

Y

Y

##### *Referencing, Consistency, and Language*

- e. Are reference numbers presented in ascending order in the text of the report?
- f. Are reference citations specific in the Reference List? e.g., Files on the Wood Treatment site" is not an adequate citation)
- g. Is the report free of contradictions?
- h. Is the report free of HRS-specific language?
- i. Are acronyms limited to generally recognized agencies, companies, chemicals, etc.?
- j. Are acronyms preceded by the full name of what they represent?

N

N

N

Y

Y

Y

## 3.2 REPORT INTRODUCTION

*Does the report introduction include:*

- |  |          |
|--|----------|
| a. Name of agency/organization performing SI?  | <u>Y</u> |
| b. Authority under which SI was conducted?   | <u>Y</u> |
| c. Site Name?  | <u>Y</u> |
| d. Site Abbreviation, if applicable, on first mention of the site name [e.g., "The Fantasy Wood Treatment Company (Fantasy) site ..."] | <u>Y</u> |
| e. Site Location? (Including city, county, state)  | <u>Y</u> |
| f. CERCLIS ID Number?  | <u>Y</u> |
| g. Date of CERCLIS entry and reason for CERCLIS entry?   | <u>N</u> |
| h. Do site name and CERCLIS ID number agree with CERCLIS entry?  | <u>Y</u> |
| i. Who did the Preliminary Assessment (PA) and the PA date?  | <u>N</u> |
| j. General purpose of the SI?  | <u>Y</u> |
| k. A brief "Apparent Problem" indicating why/how the site came to someone's attention?   | <u>Y</u> |
| l. Is the Introduction Section succinct with no extraneous information?  | <u>Y</u> |

## 3.3 SITE DESCRIPTION

Yes/No

### 3.3.1 Site Location:

*Does the site location include:*

- |  |          |
|--|----------|
| a. Street address, city, and state given:                                  | <u>Y</u> |
| b. Latitude/Longitude given? (DD°MM'SS.S" Format)                          | <u>Y</u> |
| c. Township/Range/Section given? (T/R/S Format)                            | <u>Y</u> |
| d. Site location map included?   | <u>U</u> |
| e. Is Section 2.1 (Site Location) succinct with no extraneous information? | <u>N</u> |

### 3.3.2 Site Description

*Does the site description include:*

- |  |          |
|--|----------|
| a. Site size?  | <u>Y</u> |
| b. Description of the setting? (e.g., urban, commercial, industrial, rural)                                  | <u>Y</u> |
| c. Description of what borders the site on each side?  | <u>Y</u> |
| d. Structures currently on site? (e.g., buildings, parking lots, hazardous substance storage/disposal areas) | <u>N</u> |
| e. If relevant, structures historically on site?   | <u>N</u> |
| f. Site Layout Map?  | <u>U</u> |
| g. Do site layout map and site description agree?  | <u>Y</u> |
| h. Does the boundary of the site coincide with the HRS definition of a site?                                 | <u>Y</u> |
| i. Is Section 2.2 (Site Description) succinct with no extraneous information?                                | <u>Y</u> |

### 3.3.3 Operational History

Yes/No

*Does the owner/operator information include:*

- a. Present site owner(s) and operator(s)? (including dates of ownership) I
- b. Historic site owner(s) and operator(s)? (including dates of operation) Y
- c. Information arranged chronologically, from past to present? Y
- d. No gaps in information? (e.g., owners listed 1960-75 & 1980-89, but not 1975-80) I  
Note: If information was not available at the time of the PA, this should be stated.

*Does operational / waste management information include:*

- e. Present operations along with HRS hazardous substances generated? N
- f. Historic operations along with HRS hazardous substances generated? Y
- g. How and where HRS hazardous substances were/are stored and disposed of? Y

*Sampling/Remediation*

- h. Sampling conducted by the owner/operator and not overseen by an agency? Y  
(Including dates, media sampled, analytical methods, and results.)
- i. Remediation conducted by the owner/operator and not overseen by an agency? Y  
(Including dates and what remediation was done)

*General*

- j. Is the Operational History section succinct with no extraneous information? Y

### 3.3.4 Regulatory Involvement

- a. Is regulatory involvement information organized by agency with headings for each agency? Y
- b. Is it clear which agency did what? Y
- c. Is the Regulatory Involvement Section succinct with no extraneous information? Y

*Does the regulatory involvement section include information on:*

- d. Permits? (Including issuing agency, dates, and any violations.) Y
- e. Inspections/investigations? (Including investigating agency, date, and observations.) Y
- f. Sampling conducted or overseen by regulatory agencies? (Including dates, media sampled, analytical methods, and results.) Y
- g. Remedial actions conducted or overseen by regulatory agencies? (Including dates and what remediation was done.) Y

### 3.4 INVESTIGATIVE EFFORTS

Yes/No

#### 3.4.1 Previous Sampling and Analysis

- a. Are sampling data organized by media? (e.g., soil, groundwater, sediment)

Y

*Does information in the Previous Sampling and Analysis Section include:*

- b. Sampling date(s)?

Y

- c. Name of party who conducted the sampling?

Y

- d. For whom the sampling was conducted?

Y

- e. Medium(ia) sampled? (e.g., soil, sediment, air, groundwater, surface water)

Y

- f. Where samples were collected?

N

- g. Number of samples collected?

N

- h. Sampling depths (if appropriate)?

N

- i. Laboratory methods used to analyze samples? (e.g., EPA Method 8040)

N

- j. A brief summary of the sampling results?

Y

#### 3.4.2 EPA Sampling

- a. Are sampling data organized by media? (e.g., soil, groundwater, sediment)

Y

- b. Does this section only include sampling done under the auspices of the EPA?

Y

- c. If no sampling was conducted for the EPA, is this stated and is it explained why none was done?

N/A

*IF sampling was conducted for the EPA, does information in the EPA Sampling Section include:*

- d. Sampling date(s)?

Y

- e. Name of party who conducted the sampling for the EPA?

N

- f. Medium(ia) sampled? (e.g., soil, sediment, air, groundwater, surface water)

Y

- g. Where samples were collected?

I

- h. Number of samples collected?

I

- i. Sampling depths (if appropriate)?

I

- j. Laboratory methods used to analyze samples?

I

- k. A brief summary of the sampling results?

Y

### 3.5 HRS CONSIDERATIONS

Yes/No

#### 3.5.1 Sources of Contamination

*Does the description of each source include:*

- |   |          |
|---|----------|
| a. A description of the source type? (e.g., drums, surface impoundment)   | <u>I</u> |
| b. Documented hazardous substances in the source?<br>(e.g., drums containing spent trichloroethene, per a hazardous waste manifest) | <u>N</u> |
| c. Waste quantity? (e.g., five 55-gallon drums)   | <u>N</u> |

*Are all hazardous substances CERCLA eligible?*

- |   |          |
|---|----------|
| d. No raw materials unless possibility that they have leaked/spilled/been abandoned.                                      | <u>Y</u> |
| e. No unaltered petroleum products or contamination resulting from them.<br>(e.g., leaking underground fuel storage tank) | <u>Y</u> |
| f. No permitted wastewater discharges unless suspected to pose a threat.  | <u>Y</u> |
| g. No pesticide releases associated with the legal pesticide application regulated under FIFRA.                           | <u>Y</u> |

*General:*

- |   |          |
|---|----------|
| h. Is the Sources of Contamination section succinct with no extraneous information? | <u>N</u> |
|---|----------|



### 3.5.2 Groundwater Migration Pathway

Yes/No

\*\*\* If the groundwater migration pathway does *not* contribute significantly to the site score, answer the first three questions (a-c) and skip the remainder (d-t). If the groundwater migration pathway does contribute significantly, skip questions a-c and answer the remainder. \*\*\*

**Groundwater Migration Pathway Not Scored:**

- a. Is a summary provided explaining why the groundwater pathway does not contribute significantly to the site score? N/A
- b. Is this description consistent with scoresheet rationale for non-scoring pathway? N/A
- c. Is this description **brief** with no extraneous information? N/A

**Groundwater Migration Pathway Scored:**

*Is the overall pathway description:*

- d. Clear and technically accurate? N
- e. **Succinct** with no extraneous information? N

*Does the Hydrogeologic Description include:*

- f. Regional geology together with a general geologic history and the distribution of bedrock, sediments, etc.? N
- g. Local geologic setting including water-bearing units under the site? N
- h. Depth to, thickness of, and composition of local water-bearing units? N
- i. Indication of which aquifers are major sources of groundwater locally? N
- j. If applicable, the presence/absence of aquifer interconnections? N
- k. Depth to groundwater under the site? N
- l. Direction of groundwater flow under the site? N
- m. Description of unsaturated zone materials under the site? N
- n. Net precipitation? (only if Potential to Release has been scored) N/A

*Does Groundwater Target Information include:*

- o. The nearest drinking water well to the site? N
- p. For each blended system, the following information should be provided: the total number of wells in the system, the number of these wells that are within 4 miles of the site, the percentage of water obtained from groundwater and the percentage of water obtained from surface water, and the total population served by the system. N
- q. For individual private drinking water wells, the following information should be provided: the number of private wells within 4 miles of the site and the total population served by these wells. N

*Does the Groundwater Pathway Conclusion include:*

- r. If applicable, sampling data substantiating a release to groundwater? N
- s. If a release to groundwater has not been established, brief facts pertaining to the potential to release? (e.g., "Groundwater occurs 30 feet below the site and the (unsaturated zone is comprised of sands.") N
- t. A brief summary of groundwater targets? (e.g., "Groundwater withdrawn within 4 miles of the site provides drinking water for 95,000 people." N

### 3.5.3 Surface Water Migration Pathway

Yes/No

\*\*\* If the surface water migration pathway does **not** contribute significantly to the site score answer the first three questions (a-c) and skip the remainder (d-p). If the surface water migration pathway does significantly contribute to the score, skip questions a-c and answer the remaining questions. \*\*\*

#### **Surface Water Migration Pathway Not Scored:**

- a. Is a summary provided explaining why the surface water pathway does not contribute significantly to the site score? N
- b. Is this description consistent with scoresheet rationale for non-scoring pathway? N
- c. Is this description **brief** with no extraneous information? N/A

#### **Surface Water Migration Pathway Scored:**

##### **Is the overall pathway description:**

- d. Clear and technically accurate? N
- e. **Succinct** with no extraneous information? N/A

##### **Does the Hydrologic Setting Description include:**

- f. A clear description of how runoff from the site enters surface water? (e.g., stormwater runoff from the site flows into the Babbling Brook) N
- g. Distance to the nearest surface water body (e.g., the Babbling Brook is 100 feet to the east of the site) N
- h. Description of 15-mile in-water segment? N
- i. 2-year, 24-hour rainfall? (only if Potential to Release has been scored) N
- j. Mean annual precipitation? (only in an intermittent surface water body is being included in the 15-mile in-water segment) N

##### **Does the Surface Water Target Description include:**

- k. Drinking water intakes associated with the 15-mile in-water segment? Include identification, location(s), and population served by each intake. N
- l. Fisheries associated with the 15-mile in-water segment? (including location(s) and pounds of fish caught annually) N
- m. Sensitive environments associated with the 15-mile in-water segment? (including location(s), species name(s), and wetland frontage) N

##### **Does the Surface Water Pathway Conclusion include:**

- n. If a release to surface water has been established, substantiating data? N
- o. If a release to surface water has not been established, brief facts pertaining to the potential to release? (e.g., "The site is located in a 100-year flood plain and surface runoff flows into Strawberry Creek, which is 300 feet east of the site.") N
- p. A brief target summary? (e.g., "An intake on Strawberry Creek 2 miles downstream of the site provides drinking water for 5,000 people.") N

**3.5.4 Soil Exposure and Air Migration Pathways**

**Yes/No**

\*\*\* If neither the soil exposure nor the air migration pathway does not contribute significantly to the site score, answer the first three questions (a-c) and skip the remainder (d-p). If either the soil exposure or the air migration pathway contributes significantly to the site score, skip questions a-c and answer the remaining questions. \*\*\*

***Neither Soil Exposure nor Air Migration Pathway Scored:***

- a. Is a summary provided explaining why the soil exposure and air migration pathways do not contribute significantly to the site score? Y
- b. Is this description consistent with scoresheet rationale for non-scoring pathways? Y
- c. Is this description **brief** with no extraneous information? Y

***Either Soil Exposure or Air Migration Pathway Scored:***

***Is the overall pathway description:***

- d. Clear and technically accurate? N
- e. **Succinct** with no extraneous information? N

***Does the Physical Characteristics Section Include:***

- f. Site Setting? (e.g., rural, industrial, residential) N
- g. Surface Covering? (e.g., grass, exposed soils, buildings, pavement) Y
- h. Site Accessibility? (e.g., fencing) N/A

***Does the Targets Section include:***

- i. Information on number of residents on site and within 200 feet of hazardous substance sources? N
- j. Information on number of students and day care attendees on site and within 200 feet of hazardous substance sources? N
- k. Information on number of workers on site and within 200 feet of hazardous substance sources? N
- l. Terrestrial sensitive environments located on site? N
- m. Nearby population within 1 mile? N

***Does the Soil Exposure and Air Migration Pathway Conclusion include:***

- n. If observed contamination or a release to air has been established, sampling data substantiating it? N
- o. If observed contamination or a release to air has not been established, facts pertaining to the potential to release/likelihood of exposure? (e.g., entire site is paved) N
- p. A brief target summary? (e.g., residents, students, daycare attendees, workers, sensitive environments.) N

### 3.6 EMERGENCY RESPONSE CONSIDERATIONS

Yes/No

- a. Is rationale provided explaining why emergency response actions may/may not be necessary? Y
- b. Is the rationale for doing/not doing emergency response actions site-specific and logical? U

### 3.7 SUMMARY

Yes/No

- a. Is the summary **brief**? Y
- b. Does the summary include only information from the report? (the summary should not introduce any new information.) N
- c. Are acronyms limited to generally recognized parties and are they preceded by full names the first time they are used? N

*Does the Summary Include:*

- d. A brief site description? (site name, site address, site setting, site size, and site layout.) N
- e. A brief description of operational and waste management practices? N
- f. A summary of regulatory involvement with the site? N
- g. One or two sentences covering major considerations for each of the pathways? N
- h. Bulleted, pertinent HRS factors for the site? Y

*HRS Factors*

- i. Are the HRS factors pertinent to why the site does/does not score? Y
- j. Do the HRS factors agree with the scoresheet and with the report? N